



**April 8, 2016**

**VIA PRIORITY EXPRESS MAIL**

George Emmerson, President  
Sierra Pacific Industries, Inc.  
19794 Riverside Avenue  
Anderson, CA 96007

John Phillips, Facility Operator  
Sierra Pacific Industries, Inc.  
Shasta Lake Division Sawmill  
3735 El Cajon Avenue  
Shasta Lake, CA 96019

David H. Dun  
Sierra Pacific Industries, Inc.  
Agent for Service of Process  
2313 I Street  
Eureka, CA 95501

**RE: NOTICE OF VIOLATIONS AND INTENT TO FILE SUIT UNDER THE FEDERAL  
WATER POLLUTION CONTROL ACT ("CLEAN WATER ACT") (33 U.S.C. §§  
1251 *et seq.*)**

Dear Mr. Emmerson and Mr. Phillips,

This firm represents Battle Creek Alliance ("the Alliance"), a California non-profit association, in regard to violations of the Clean Water Act ("CWA" or "the Act") occurring at Sierra Pacific Industries, Inc.'s Shasta Lake Division Sawmill (the "Facility"). This letter is being sent to you as the responsible owners, officers, and/or operators of the Facility. Unless otherwise noted, Sierra Pacific Industries, Inc., shall hereinafter be collectively referred to as "SPI," and George Emmerson and John Phillips shall hereinafter be collectively referred to as the "Owners/Operators." The Alliance is a non-profit association dedicated to the preservation, protection, and defense of the environment, wildlife, and natural resources of California waters, including the waters into which SPI discharges polluted storm water.

SPI is in ongoing violation of the substantive and procedural requirements of the CWA, 33 U.S.C. § 1251 *et seq.*; California's General Industrial Storm Water Permit, National Pollution Discharge Elimination System ("NPDES") General Permit No. CAS000001 ("General Permit"), Water Quality Order No. 97-03-DWQ ("1997 General Permit"), as superseded by Order No. 2015-0057-DWQ ("2015 General Permit");<sup>1</sup> and

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<sup>1</sup> SPI submitted a NOI to comply with the General Permit for the Facility on or about August 13, 2015.



Central Valley Regional Water Quality Control Board (“CVRQCB”) Order No. R5-2010-0034, NPDES No. CA0081400 (“Individual Permit”).

The 1997 General Permit was in effect between 1997 and June 30, 2015, and the 2015 General Permit went into effect on July 1, 2015. As will be explained below, the 2015 General Permit includes many of the same fundamental requirements, and implements many of the same statutory requirements, as the 1997 General Permit. Violations of both the Individual Permit and the General Permit constitute ongoing violations for purposes of CWA enforcement. 2015 General Permit, Finding A.6.

Pursuant to Section 309(d) of the Act (33 U.S.C. § 1319(d)) and the Adjustment of Civil Monetary Penalties for Inflation (40 C.F.R. § 19.4) each separate violation of the Act subjects SPI to a penalty of up to \$37,500 per day, per violation for all violations occurring during the period commencing five years prior to the date of this Notice of Violation and Intent to File Suit. In addition to civil penalties, the Alliance will seek injunctive relief preventing further violations of the Act pursuant to Sections 505(a) and (d) of the Act (33 U.S.C. §§ 1365(a), (d)) and such other relief as permitted by law. Lastly, Section 505(d) of the Act (33 U.S.C. § 1365(d)) permits prevailing parties to recover costs and fees including attorneys’ fees.

The CWA requires that sixty (60) days prior to the initiation of a citizen-enforcement action under Section 505(a) of the Act (33 U.S.C. § 1365(a)), a citizen enforcer must give notice of its intent to file suit. Notice must be given to the alleged violator, the U.S. Environmental Protection Agency, and the Chief Administrative Officer of the water pollution control agency for the State in which the violations occur. See 40 C.F.R. 135.2.

As required by the Act, this letter provides statutory notice of the violations that have occurred, and continue to occur, at the Facility. 40 C.F.R. § 135.3(a). At the expiration of sixty (60) days from the date of this letter, the Alliance intends to file suit under Section 505(a) of the Act (33 U.S.C. § 1365(a)) in federal court against Sierra Pacific Industries, Inc. for violations of the Act, the General Permit, and the Individual Permit.

## **I. Background**

### **A. The Clean Water Act**

Congress enacted the CWA in 1972 in order to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251. The Act prohibits the discharge of pollutants into United States waters except as authorized by the statute. 33 U.S.C. § 1311; *San Francisco Baykeeper, Inc. v. Tosco Corp.*, 309 F.3d 1153, 1156 (9th Cir. 2002). The Act is administered largely through the NPDES permit program. 33 U.S.C. § 1342. In 1987, the Act was amended to establish a



framework for regulating storm water discharges through the NPDES system. Water Quality Act of 1987, Pub. L. 100-4, § 405, 101 Stat. 7, 69 (1987) (codified at 33 U.S.C. § 1342(p)); *see also Env'tl. Def. Ctr., Inc. v. EPA*, 344 F.3d 832, 840-41 (9th Cir. 2003) (describing the problem of storm water runoff and summarizing the Clean Water Act's permitting scheme). The discharge of pollutants without an NPDES permit, or in violation of a NPDES permit, is illegal. *Ecological Rights Found. v. Pac. Lumber Co.*, 230 F.3d 1141, 1145 (9th Cir. 2000).

Much of the responsibility for administering the NPDES permitting system has been delegated to the states. *See* 33 U.S.C. § 1342(b); *see also* Cal. Water Code § 13370 (expressing California's intent to implement its own NPDES permit program). The CWA authorizes states with approved NPDES permit programs to regulate industrial storm water discharges through individual permits issued to dischargers, as well as through the issuance of a single, statewide general permit applicable to all industrial storm water dischargers. 33 U.S.C. § 1342(b). Pursuant to Section 402 of the Act, the Administrator of EPA has authorized California's State Board to issue individual and general NPDES permits in California. 33 U.S.C. § 1342.

#### **B. California's General Permit for Storm Water Discharges Associated with Industrial Activities**

Between 1997 and June 30, 2015, the General Permit in effect was Order No. 97-03-DWQ, which the Alliance refers to as the "1997 General Permit." On July 1, 2015, pursuant to Order No. 2015-0057-DWQ the General Permit was reissued, including many of the same fundamental terms as the prior permit. For purposes of this notice letter, the Alliance refers to the reissued permit as the "2015 General Permit." The 2015 General Permit rescinded in whole the 1997 General Permit, except for the expired permit's requirement that annual reports be submitted by July 1, 2015, and for purposes of CWA enforcement. 2015 General Permit, Finding A.6.

Facilities discharging, or having the potential to discharge, storm water associated with industrial activities that have not obtained an individual NPDES permit must apply for coverage under the General Permit by filing a Notice of Intent to Comply ("NOI"). 1997 General Permit, Provision E.1; 2015 General Permit, Standard Condition XXI.A. Facilities must file their NOIs before the initiation of industrial operations. *Id.*

Facilities must strictly comply with all of the terms and conditions of the General Permit. A violation of the General Permit is a violation of the CWA.

The General Permit contains three primary and interrelated categories of requirements: (1) discharge prohibitions, receiving water limitations and effluent limitations; (2) Storm Water Pollution Prevention Plan ("SWPPP") requirements; and (3) self-monitoring and reporting requirements.



### **C. SPI's Individual NPDES Permit**

The Individual Permit (CVRQCB Order No. R5-2010-0034, NPDES No. CA0081400) governing SPI's discharges from the Facility was issued on March 18, 2010, and expired on March 1, 2015. Based on information currently available to the Alliance, the CVRWQCB has not renewed the Individual Permit, nor has it issued a new and revised permit governing SPI's discharges from the Facility.

Section IV of the Individual Permit sets final effluent limitations exiting the Facility from Discharge Point D-002 for the following parameters: pH, settleable solids, total suspended solids ("TSS"), copper (total recoverable), lead (total recoverable), and zinc (total recoverable).

### **D. SPI's Shasta Lake Facility**

SPI's approximately 122-acre sawmill facility consists of a paved log yard, sawmill, sorter/stacker, planer, various storage sheds, drying kilns, boiler, bone yard, maintenance shop, and an office. The industrial activities of the Facility fall under Standard Industrial Classification ("SIC") Code 2421 – Sawmills and Planing Mills, General.

SPI collects and discharges storm water associated with industrial activities pursuant to the General Permit through the following discharge locations identified in the SPI's SWPPP: SW-1, SW-2, SW-IN, and SW-OUT. As mentioned above, SPI collects and discharges water containing pollutants into a water of the United States pursuant to the Individual Permit at Discharge Point D-002. These discharges enter an unnamed tributary of Churn Creek, which is tributary to the Sacramento River. The unnamed tributary of Churn Creek, Churn Creek itself, and the Sacramento River are all waters of the United States within the meaning of the CWA.

The General Permit requires SPI to analyze storm water samples for TSS, pH, and Oil and Grease. 1997 General Permit, Section B.5.c.i; 2015 General Permit, Section XI.B.6. Facilities under SIC Code 2421 must also analyze storm water samples for chemical oxygen demand ("COD") and zinc. 1997 General Permit, Tables 1-2; 2015 General Permit Tables 1-2.

## **II. SPI's Violations of the Act and the Individual and General Permits**

Based on its review of available public documents, the Alliance is informed and believes that SPI is in ongoing violation of both the substantive and procedural requirements of the CWA, and the Individual and General Permits. These violations are ongoing and continuous. Consistent with the five-year statute of limitations applicable to citizen enforcement actions brought pursuant to the CWA, SPI is subject to penalties for violations of the Act since April 7, 2011.



**A. SPI Discharges Storm Water Containing Pollutants in Violation of the General Permit's Discharge Prohibitions, Receiving Water Limitations, and Effluent Limitations.**

SPI's storm water sampling results provide conclusive evidence of Sierra Pacific Industries failure to comply with the General Permit's discharge prohibitions, receiving water limitations and effluent limitations. Self-monitoring reports under the General Permit are deemed "conclusive evidence of an exceedance of a permit limitation." *Sierra Club v. Union Oil*, 813 F.2d 1480, 1493 (9th Cir. 1988).

**1. Applicable Water Quality Standards**

The General Permit requires that storm water discharges and authorized non-storm water discharges shall not cause or threaten to cause pollution, contamination, or nuisance. 1997 General Permit, Discharge Prohibition A.2; 2015 General Permit, Discharge Prohibition III.C. The General Permit also prohibits discharges that violate any discharge prohibition contained in the applicable Regional Water Board's Basin Plan or statewide water quality control plans and policies. 1997 General Permit, Receiving Water Limitation C.2; 2015 General Permit, Discharge Prohibition III.D. Furthermore, storm water discharges and authorized non-storm water discharges shall not adversely impact human health or the environment, and shall not cause or contribute to a violation of any water quality standards in any affected receiving water. 1997 General Permit, Receiving Water Limitations C.1, C.2; 2015 General Permit, Receiving Water Limitations VI.A, VI.B.

Dischargers are also required to prepare and submit documentation to the Regional Board upon determination that storm water discharges are in violation of the General Permit's Receiving Water Limitations. 1997 General Permit, p. VII; 2015 General Permit, Special Condition XX.B. The documentation must describe changes the discharger will make to its current storm water best management practices ("BMPs") in order to prevent or reduce any pollutant in its storm water discharges that is causing or contributing to an exceedance of water quality standards. *Id.*

The California Toxics Rule ("CTR") is an applicable water quality standard under the Permit, violation of which is a violation of Permit conditions. *Cal. Sportfishing Prot. Alliance v. Chico Scrap Metal, Inc.*, 2015 U.S. Dist. LEXIS 108314, \*21 (E.D. Cal. 2015) CTR establishes numeric receiving water limits for toxic pollutants in California surface waters. 40 C.F.R. § 131.38. The CTR establishes a numeric limit for at least one of the pollutants discharged by SPI: Zinc – 0.12 mg/L (maximum concentration).

The *Water Quality Control Plan, Fourth Edition (Revised August 2006)*, for the *Sacramento and San Joaquin River Basins* ("Basin Plan") also sets forth water quality standards and prohibitions applicable to SPI's storm water discharges. While the Basin



Plan does not specify beneficial uses for Churn Creek or its unnamed tributary, it does identify present and potential uses for Sacramento River, to which the unnamed tributary and Churn Creek are tributary. Thus, the existing beneficial uses for the unnamed tributary and Churn Creek include municipal and domestic water supply, hydropower generation, agricultural supply, industrial service supply, navigation, wildlife habitat, warm freshwater habitat, cold freshwater habitat, warm and cold spawning, and contact and non-contact water recreation.

## **2. Applicable Effluent Limitations**

Dischargers are required to reduce or prevent pollutants in their storm water discharges through implementation of best available technology economically achievable ("BAT") for toxic and nonconventional pollutants and best conventional pollutant control technology ("BCT") for conventional pollutants. 1997 General Permit, Effluent Limitation B.3; 2015 General Permit, Effluent Limitation V.A. Conventional pollutants include Total Suspended Solids, Oil & Grease, pH, Biochemical Oxygen Demand and Fecal Coliform. 40 C.F.R. § 401.16. All other pollutants are either toxic or nonconventional. 40 C.F.R. §§ 401.15-16.

Under the General Permit, benchmark levels established by the EPA ("EPA benchmarks") serve as guidelines for determining whether a facility discharging industrial storm water has implemented the requisite BAT and BCT. *Santa Monica Baykeeper v. Kramer Metals*, 619 F.Supp.2d 914, 920, 923 (C.D. Cal 2009); 1997 General Permit, Effluent Limitations B.5-6; 2015 General Permit, Exceedance Response Action XII.A.

The following EPA benchmarks have been established for pollutants discharged by SPI: Total Suspended Solids – 100 mg/L; Zinc – 0.117 mg/L; Chemical Oxygen Demand – 120 mg/L; and Oil & Grease – 15.0 mg/L.

## **3. Sierra Pacific Industries' Storm Water Sample Results**

The following discharges of pollutants from the Facility have violated the discharge prohibitions, receiving water limitations, and effluent limitations of the permit.

### **a. Discharge of Storm Water Containing Total Suspended Solids (TSS) at Concentrations in Excess of Applicable EPA Benchmark Value**

<b>Date</b>	<b>Discharge Point</b>	<b>Parameter</b>	<b>Concentration in Discharge (mg/L)</b>	<b>EPA Benchmark Value (mg/L)</b>
2/14/2011	SW-2	TSS	122	100



9/25/2014	SW-2	COD	346	120
10/20/2014	SW-1	COD	215	120
10/20/2014	SW-2	COD	152	120
2/6/2015	SW-OUT	COD	153	120

**d. SPI's Sample Results Are Evidence of Violations of the General Permit**

SPI's sample results demonstrate violations of the General Permit's discharge prohibitions, receiving water limitations, and effluent limitations set forth above. The Alliance is informed and believes that the SPI has known that its storm water contains pollutants at levels exceeding General Permit standards since at least April 7, 2011.

The Alliance alleges that such violations occur each time storm water discharges from the Facility. Attachment A hereto, sets forth the specific rain dates on which the Alliance alleges that SPI has discharged storm water containing impermissible levels of TSS, Zn, and COD in violation of the General Permit. 1997 General Permit, Discharge Prohibition A.2, Receiving Water Limitations C.1 and C.2; 2015 General Permit, Discharge Prohibitions III.C and III.D, Receiving Water Limitations VI.A, VI.B.

**4. SPI Has Failed to Implement BAT and BCT**

Dischargers must implement BMPs that fulfill the BAT/BCT requirements of the CWA and the General Permit to reduce or prevent discharges of pollutants in their storm water discharges. 1997 General Permit, Effluent Limitation B.3; 2015 General Permit, Effluent Limitation V.A. To meet the BAT/BCT standard, dischargers must implement minimum BMPs and any advanced BMPs set forth in the General Permit's SWPPP Requirements provisions where necessary to reduce or prevent pollutants in discharges. See 1997 General Permit, Sections A.8.a-b; 2015 General Permit, Sections X.H.1-2.

SPI has failed to implement the minimum BMPs required by the General Permit, including: good housekeeping requirements; preventive maintenance requirements; spill and leak prevention and response requirements; material handling and waste management requirements; erosion and sediment controls; employee training and quality assurance; and record keeping. 1997 General Permit, Sections A.8.a(i-x); 2015 General Permit, Sections X.H.1(a-g).

SPI has further failed to implement advanced BMPs necessary to reduce or prevent discharges of pollutants in its storm water sufficient to meet the BAT/BCT standards, including: exposure minimization BMPs; containment and discharge reduction BMPs; treatment control BMPs; or other advanced BMPs necessary to



comply with the General Permit's effluent limitations. 1997 General Permit, Section A.8.b; 2015 General Permit, Sections X.H.2.

Each day the Owners/Operators have failed to develop and implement BAT and BCT at the Facility in violation of the General Permit is a separate and distinct violation of Section 301(a) of the CWA (33 U.S.C. § 1311(a)). The violations described above were at all times in violation of Section A of the 1997 General Permit, and Section X of the 2015 General Permit. Accordingly, the Owners/Operators have been in violation of the BAT and BCT requirements at the Facility every day since at least April 7, 2011.

#### **5. SPI Has Failed to Develop and Implement an Adequate Storm Water Pollution Plan**

The General Permit requires dischargers to develop and implement a site-specific SWPPP. 1997 General Permit, Section A.1; 2015 General Permit, Section X.A. The SWPPP must include, among other elements: (1) the facility name and contact information; (2) a site map; (3) a list of industrial materials; (4) a description of potential pollution sources; (5) an assessment of potential pollutant sources; (6) minimum BMPs; (7) advanced BMPs, if applicable; (8) a monitoring implementation plan; (9) annual comprehensive facility compliance evaluation; and (10) the date that the SWPPP was initially prepared and the date of each SWPPP amendment, if applicable. *See id.*

Dischargers must revise their SWPPP whenever necessary and certify and submit via the Regional Board's Storm Water Multiple Application and Report Tracking System ("SMARTS") their SWPPP within 30 days whenever the SWPPP contains significant revisions(s); and, certify and submit via SMARTS for any non-significant revisions not more than once every three (3) months in the reporting year. 2015 General Permit, Section X.B; see also 1997 General permit, Section A.

The Alliance's investigation indicates that SPI has been operating with an inadequately developed or implemented SWPPP in violation of General Permit requirements. SPI has failed to evaluate the effectiveness of its BMPs and to revise its SWPPP as necessary, resulting in the Facility's numerous effluent limitation violations.

Each day the Owners/Operators failed to develop and implement an adequate SWPPP is a violation of the General Permit. The SWPPP violations described above were at all times in violation of Section A of the 1997 General Permit, and Section X of the 2015 General Permit. The Owners/Operators have been in violation of these requirements at the Facility every day since at least April 7, 2011.

#### **B. Sierra Pacific Industries Discharges Pollutants into Navigable Waters in Violation of its Individual Permit.**



Section IV, Table 6 of the Individual Permit states the effluent limitations for discharges from Discharge Point D-002 for the following parameters: TSS (100 mg/L max. daily); copper (total recoverable) (1.82 ug/L avg. monthly; 3.64 ug/L max. daily), lead (total recoverable) (0.32 ug/L avg. monthly; 0.63 max. daily), and zinc (total recoverable) (5.33 ug/L avg. monthly; 10.69 ug/L max. daily). Section IV.A.1.b states the effluent limitation for acute whole effluent toxicity, which is no less than 70% survival of aquatic organisms in 96-hour bioassays of undiluted waste.

According to publicly available data on the California Integrated Water Quality System's ("CWIQS") website, SPI is violating these effluent limitations at Discharge Point D-002:

1. Acute Toxicity reported value: 5% (minimum value is 70%);
2. Copper, total recoverable monthly average reported value: 3.2 ug/L (limit is 1.82 ug/L);
3. Lead, total recoverable monthly average reported value: 0.4 ug/L (limit is 0.32 ug/L);
4. Zinc, total recoverable daily maximum reported value: 16.2 ug/L (limit is 10.69 ug/L);
5. Zinc, total recoverable monthly average reported value: 16.2 ug/L (limit is 5.33 ug/L).

Each day the Owners/Operators discharge pollutants into navigable waters from Discharge Point D-002 is a violation of the CWA. 33 U.S.C. §§ 1311(a), 1342. The SWPPP violations described above were at all times in violation of the CWA. 33 U.S.C. §§ 1311(a), 1342. The Owners/Operators have been in violation of these requirements at the Facility every day since at least April 7, 2011.

### **III. Persons Responsible for the Violations**

The Alliance puts SPI on notice that it is the entity responsible for the violations described above. If additional persons are subsequently identified as also being responsible for the violations set forth above, the Alliance puts SPI on formal notice that it intends to include those persons in this action.

### **IV. Name and Address of Noticing Party**

The name, address, and telephone number of the noticing party is as follows:

Marily Woodhouse, Director  
Battle Creek Alliance  
P.O. Box 225  
Montgomery Creek, CA 96065



(530) 474-5803  
[www.thebattlecreekalliance.org](http://www.thebattlecreekalliance.org)

## V. Counsel

The Alliance has retained legal counsel to represent it in this matter. Please direct all communications to:

Jason R. Flanders  
AQUA TERRA AERIS (ATA) LAW  
GROUP  
409 45<sup>th</sup> Street  
Oakland, CA 94609  
(916) 202-3018  
[jrf@atalawgroup.com](mailto:jrf@atalawgroup.com)

Andrew L. Packard  
LAW OFFICES OF ANDREW L.  
PACKARD  
100 Petaluma Boulevard North, Suite 301  
Petaluma, CA 94952  
(707) 763-7227  
[Andrew@PackardLawOffices.com](mailto:Andrew@PackardLawOffices.com)

## VI. Conclusion

The Alliance believes this Notice of Violations and Intent to File Suit sufficiently states grounds for filing suit. We intend to file a citizen suit under Section 505(a) of the CWA against Sierra Pacific Industries, Inc., and its agents for the above-referenced violations upon the expiration of the 60-day notice period. If you wish to pursue remedies in the absence of litigation, we suggest that you initiate those discussions within the next twenty (20) days so that they may be completed before the end of the 60-day notice period. We do not intend to delay the filing of a complaint in federal court if discussions are continuing when that period ends.

Sincerely,



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Jason R. Flanders  
ATA Law Group  
Counsel for Battle Creek  
Alliance



**SERVICE LIST**

**VIA CERTIFIED MAIL**

Lisa Jackson, Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

Jared Blumenfield, Regional  
Administrator  
U.S. Environmental Protection Agency  
Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

Thomas Howard, Executive Director  
State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812

Pamela Creedon, Executive Officer  
Central Valley Regional Water Quality  
Control Board  
11020 Sun Center Drive, Suite 200  
Rancho Cordova, CA 95670



**EXHIBIT A**  
**Significant Rain Events (over 0.1")**<sup>[1]</sup>

Station: SHASTA DAM CA US (GHCND:USC00048135)

Latitude: 40.7141; Longitude: -122.4161

Date	Total (in)
4/13/2011	0.54
4/21/2011	0.88
4/24/2011	0.18
4/25/2011	0.17
5/15/2011	0.39
5/16/2011	1.14
5/17/2011	1.22
5/18/2011	0.96
5/26/2011	0.78
5/27/2011	0.50
5/31/2011	0.12
6/1/2011	1.71
6/2/2011	0.16
6/5/2011	0.11
6/7/2011	0.29
6/28/2011	0.49
6/29/2011	1.49
7/14/2011	0.27
9/13/2011	0.14
10/4/2011	0.27
10/5/2011	1.93
10/6/2011	0.52
10/10/2011	0.38
10/11/2011	0.87
11/3/2011	0.23
11/6/2011	0.72
11/20/2011	0.40
11/22/2011	0.35
11/23/2011	0.18
11/24/2011	1.50
12/15/2011	0.26
12/31/2011	0.41
1/19/2012	0.85
1/20/2012	1.77
1/21/2012	2.25
1/23/2012	2.13
1/25/2012	0.31
1/26/2012	0.25
2/1/2012	0.28
2/8/2012	0.72
2/13/2012	0.54
2/29/2012	1.01
3/1/2012	0.36
3/12/2012	0.38

[1] Source: National Centers for Environmental Information

<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/locations/CITY:US060023/detail>



**EXHIBIT A**  
**Significant Rain Events (over 0.1") [1]**

3/13/2012	0.68
3/14/2012	1.74
3/15/2012	1.82
3/16/2012	3.95
3/17/2012	1.00
3/22/2012	0.17
3/25/2012	1.15
3/26/2012	0.45
3/27/2012	1.24
3/28/2012	3.81
3/30/2012	2.00
3/31/2012	0.42
4/1/2012	0.38
4/4/2012	0.19
4/10/2012	0.31
4/11/2012	1.09
4/12/2012	1.40
4/13/2012	1.35
4/14/2012	0.58
5/4/2012	0.58
6/5/2012	0.42
10/22/2012	1.01
10/24/2012	0.49
11/1/2012	0.76
11/9/2012	0.87
11/17/2012	2.00
11/18/2012	0.99
11/19/2012	0.24
11/20/2012	1.45
11/21/2012	4.06
11/28/2012	0.12
11/29/2012	1.58
11/30/2012	3.52
12/1/2012	5.00
12/2/2012	3.47
12/4/2012	0.42
12/5/2012	1.57
12/16/2012	0.90
12/17/2012	0.88
12/21/2012	1.93
12/22/2012	1.75
12/23/2012	0.98
12/24/2012	1.52
12/26/2012	0.87
12/29/2012	0.24
1/24/2013	0.81
2/8/2013	0.20

[1] Source: National Centers for Environmental Information  
<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/locations/CITY:US060023/detail>



**EXHIBIT A**  
**Significant Rain Events (over 0.1") [1]**

2/19/2013	0.13
2/20/2013	0.29
3/6/2013	1.70
3/7/2013	0.12
3/20/2013	0.66
3/21/2013	0.11
3/31/2013	1.70
4/1/2013	0.49
4/5/2013	1.24
5/27/2013	0.19
5/28/2013	0.24
6/24/2013	0.35
6/25/2013	0.71
6/26/2013	2.51
9/21/2013	0.72
9/22/2013	0.71
9/30/2013	0.66
11/19/2013	0.85
11/20/2013	0.95
11/21/2013	0.50
12/7/2013	0.32
1/12/2014	0.13
1/30/2014	0.29
2/6/2014	0.18
2/7/2014	0.32
2/8/2014	3.15
2/9/2014	1.30
2/10/2014	1.14
2/13/2014	0.57
2/14/2014	0.20
2/16/2014	0.88
2/26/2014	0.12
2/27/2014	2.49
2/28/2014	2.61
3/1/2014	1.20
3/3/2014	1.53
3/4/2014	1.80
3/5/2014	0.33
3/6/2014	1.75
3/9/2014	0.19
3/10/2014	0.94
3/26/2014	0.99
3/27/2014	1.24
3/28/2014	0.30
3/29/2014	2.25
4/1/2014	0.95
4/2/2014	0.73

[1] Source: National Centers for Environmental Information  
<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/locations/CITY:US060023/detail>



**EXHIBIT A**  
**Significant Rain Events (over 0.1") [1]**

4/26/2014	0.22
4/27/2014	0.11
5/6/2014	0.15
8/6/2014	0.37
9/25/2014	2.00
9/26/2014	0.54
10/21/2014	0.50
10/23/2014	0.47
10/24/2014	0.59
10/25/2014	0.47
10/26/2014	2.17
10/31/2014	0.72
11/1/2014	0.21
11/13/2014	0.45
11/20/2014	0.51
11/21/2014	0.20
11/22/2014	2.18
11/29/2014	0.85
11/30/2014	0.45
12/1/2014	0.23
12/3/2014	0.77
12/4/2014	1.22
12/5/2014	0.47
12/6/2014	1.35
12/8/2014	0.37
12/9/2014	0.97
12/10/2014	0.11
12/11/2014	6.09
12/12/2014	2.20
12/13/2014	0.20
12/15/2014	0.21
12/16/2014	1.02
12/17/2014	2.01
12/18/2014	1.01
12/19/2014	2.20
12/20/2014	0.92
12/21/2014	1.31
12/25/2014	0.12
1/16/2015	0.33
1/19/2015	0.12
2/2/2015	0.25
2/3/2015	0.44
2/6/2015	1.54
2/7/2015	6.65
2/8/2015	0.70
2/9/2015	1.36
2/10/2015	0.20

[1] Source: National Centers for Environmental Information  
<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/locations/CITY:US060023/detail>



**EXHIBIT A**  
**Significant Rain Events (over 0.1") [1]**

3/12/2015	0.36
3/16/2015	0.22
3/23/2015	0.44
4/6/2015	0.20
4/7/2015	0.70
4/8/2015	1.15
5/11/2015	0.15
5/13/2015	0.24
5/17/2015	0.65
5/21/2015	0.11
6/4/2015	0.21
6/5/2015	0.25
6/10/2015	0.76
7/9/2015	0.35
8/30/2015	0.50
9/17/2015	1.09
10/17/2015	0.30
11/8/2015	0.11
11/9/2015	0.31
11/10/2015	0.45
11/15/2015	0.68
11/24/2015	0.24
11/25/2015	0.17
12/4/2015	1.48
12/6/2015	1.20
12/7/2015	0.20
12/8/2015	0.11
12/9/2015	0.26
12/10/2015	2.10
12/11/2015	0.11
12/13/2015	2.02
12/14/2015	0.14
12/18/2015	0.45
12/19/2015	1.36
12/20/2015	0.28
12/21/2015	1.43
12/22/2015	1.32
12/24/2015	0.12
12/30/2015	0.12
1/5/2016	2.37
1/6/2016	1.42
1/7/2016	1.41
1/9/2016	0.53
1/10/2016	0.45
1/13/2016	1.71
1/14/2016	0.43
1/15/2016	1.29

[1] Source: National Centers for Environmental Information  
<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/locations/CITY:US060023/detail>



**EXHIBIT A**  
**Significant Rain Events (over 0.1")**[1]

1/16/2016	0.53
1/17/2016	0.98
1/18/2016	2.48
1/19/2016	2.19
1/20/2016	1.96
1/22/2016	1.36
1/23/2016	1.29
1/25/2016	0.27
1/29/2016	1.68
1/30/2016	0.43
1/31/2016	0.42
2/4/2016	0.16
2/18/2016	0.72
2/19/2016	1.72
2/20/2016	0.27
3/3/2016	0.16
3/5/2016	1.36
3/6/2016	2.52
3/7/2016	1.12
3/9/2016	0.36
3/10/2016	0.88
3/11/2016	2.92
3/12/2016	1.48
3/13/2016	2.52
3/21/2016	0.76
3/22/2016	1.00

[1] Source: National Centers for Environmental Information  
<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/locations/CITY:US060023/detail>

**EXHIBIT A**  
**Significant Rain Events (over 0.1") [1]**

Station: REDDING 4.1 N CA US (GHCND:US1CASH0024)

Latitude: 40.6312; Longitude: -122.3584

Date	Total (in)
4/20/2011	0.25
4/21/2011	0.76
4/25/2011	0.11
5/15/2011	0.22
5/16/2011	1.04
5/17/2011	0.80
5/18/2011	1.28
5/26/2011	0.82
5/29/2011	0.15
6/1/2011	1.30
6/5/2011	0.15
6/7/2011	0.16
6/28/2011	0.33
10/4/2011	0.12
10/5/2011	1.50
10/6/2011	0.50
10/7/2011	0.50
10/11/2011	0.83
11/6/2011	0.65
11/20/2011	0.45
11/22/2011	0.55
11/23/2011	0.20
11/24/2011	1.57
12/15/2011	0.12
12/31/2011	0.30
2/29/2012	0.50
3/1/2012	0.14
3/11/2012	0.11
3/13/2012	0.41
3/14/2012	1.14
3/15/2012	1.10
3/16/2012	0.90
3/17/2012	0.61
3/22/2012	0.24
3/25/2012	1.10
3/26/2012	0.41
3/27/2012	0.37
3/30/2012	0.82
3/31/2012	0.11
4/1/2012	0.97
4/10/2012	0.20
4/11/2012	1.26
4/12/2012	0.52
4/13/2012	0.47

[1] Source: National Centers for Environmental Information

<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/locations/CITY:US060023/detail>



**EXHIBIT A**  
**Significant Rain Events (over 0.1") [1]**

4/14/2012	0.25
4/26/2012	0.30
6/5/2012	0.75
10/22/2012	0.60
10/23/2012	0.21
10/24/2012	0.33
11/17/2012	1.55
11/18/2012	1.15
11/20/2012	0.16
11/21/2012	2.12
11/22/2012	0.48
11/29/2012	0.77
12/1/2012	0.70
12/2/2012	2.55
12/16/2012	0.65
12/17/2012	1.07
12/21/2012	1.80
12/22/2012	1.60
12/23/2012	0.88
12/24/2012	1.02
12/25/2012	0.15
12/26/2012	0.80
12/29/2012	0.20
1/24/2013	0.75
2/8/2013	0.30
3/31/2013	1.53
4/1/2013	0.53
4/5/2013	0.37
4/6/2013	0.52
5/17/2013	0.25
5/27/2013	0.15
5/28/2013	0.50
6/24/2013	0.64
6/25/2013	0.63
6/26/2013	1.04
9/22/2013	0.77
9/30/2013	0.22
11/19/2013	0.52
11/20/2013	0.95
11/21/2013	0.35
12/7/2013	0.50
1/30/2014	0.29
2/7/2014	0.50
2/8/2014	1.85
2/9/2014	1.13
2/10/2014	1.21
2/13/2014	0.41

[1] Source: National Centers for Environmental Information  
<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/locations/CITY:US060023/detail>

**EXHIBIT A**  
**Significant Rain Events (over 0.1")**[1]

2/14/2014	0.18
2/16/2014	0.13
2/27/2014	1.34
3/26/2014	0.48
3/27/2014	0.82
3/28/2014	0.18
3/30/2014	0.14
3/31/2014	0.64
4/1/2014	0.52
9/25/2014	1.04
9/26/2014	0.58
10/15/2014	0.22
10/21/2014	0.36
10/23/2014	0.23
10/24/2014	0.35
10/25/2014	0.40
10/26/2014	0.74
10/31/2014	0.30
11/13/2014	0.30
11/20/2014	0.60
11/22/2014	1.10
11/29/2014	0.63
11/30/2014	0.50
12/1/2014	0.18
12/3/2014	0.77
12/4/2014	1.03
12/5/2014	0.46
12/8/2014	0.40
12/9/2014	0.41
12/11/2014	3.20
12/12/2014	0.95
12/13/2014	0.15
12/16/2014	1.00
12/17/2014	0.82
12/18/2014	1.01
12/19/2014	1.61
12/21/2014	1.40
12/22/2014	0.20
12/25/2014	0.14
1/16/2015	0.20
1/18/2015	0.30
1/19/2015	0.23
2/2/2015	0.40
2/3/2015	0.19
2/6/2015	1.07
2/7/2015	1.30
2/8/2015	0.16

[1] Source: National Centers for Environmental Information  
<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/locations/CITY:US060023/detail>



**EXHIBIT A**  
**Significant Rain Events (over 0.1") [1]**

3/12/2016	0.55
3/13/2016	1.62
3/14/2016	0.83
3/21/2016	0.90

[1] Source: National Centers for Environmental Information  
<http://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/locations/CITY:US060023/detail>